

# distro

engadget

030912 #31

## INTERNET TALES *from* SOUTH *the* PACIFIC

Bringing Wireless to the Disconnected

BY DARREN MURPH

Apple's  
New iPad

Is **Lytro's Light Field**  
Camera Infinitely Better?

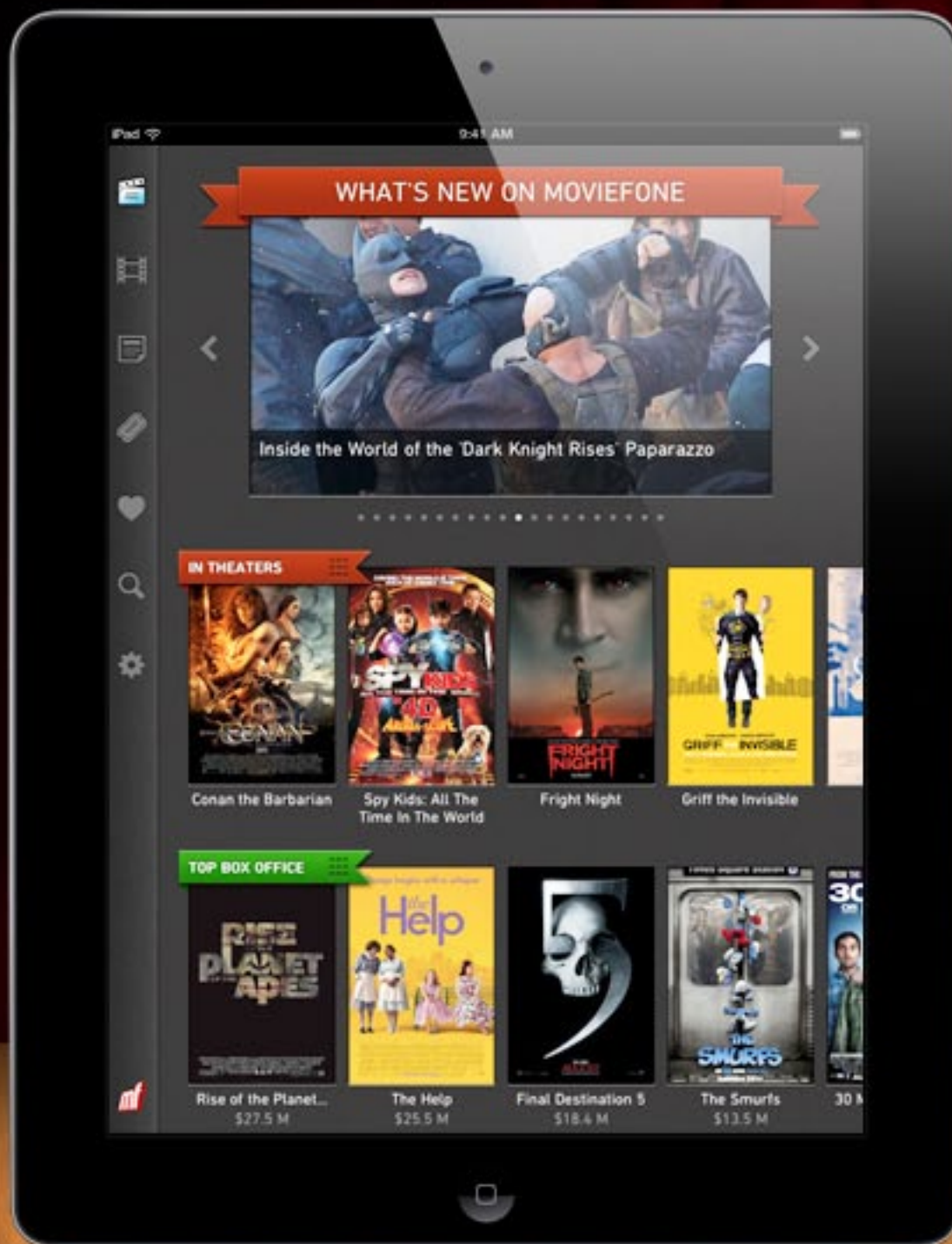
Is **Dell's XPS 13** All  
Beauty and No Brawn?

And **Steve Wozniak**  
Takes on the Distro Q&A



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# DISTRO Issue #31...



*“I can see the BlueSky cell tower from my fale; it doesn’t look like a detraction of the natural beauty. It looks like a broadcasting beacon of hope.”*

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*By Tim Stevens*

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*By Sean Pryor*



# The New, New iPad

*Editor's Letter*

**Well, we can finally stop talking about the iPad 3, iPad 2S, iPad HD and the rest of its ilk. We now know what the new iPad is going to be called — just that and nothing more. This finally signals a dose of sanity in the product naming for Apple's iOS devices, which are all more or less falling into annual releases like the company's line of MacBooks, iMacs and so forth.**

So, this means we'll probably get a "the new iPhone" this fall — ending years of speculation on what the iPhone 5 will look like — and we can merrily go on our way to a somewhat uncomfortable future where the iPad is actually newer and cooler than the iPad 2. This also begs the question of what Apple might choose to call a smaller, lower-end tablet should it ever decide to aim directly at Amazon's Kindle Fire. Perhaps the iNote?

We have the full run-down of the thing courtesy of Darren Murph later in this issue, but name aside, we got exactly what we expected with the new iPad — that is to say a device that looks almost exactly like the current one, including the same visual styling and same 9.7-inch glassy expanse on the front. But, what's beneath that glass, the new 2048 x 1536 Ret-



ina LCD, looks like it will truly push the industry forward.

For ages we've been limping along with low-res portable devices and only recently have smartphones pushed into HD territory — albeit only the land of 720p. At CES a few tablets showed promise of 1080p on a slate, but Apple's the first to get something *that* chock full of pixels to market and so it will

reap the sweetest rewards.

But, even if the mere idea of owning an Apple product makes you uncomfortable, you'll still be a winner in the long run. Apple pushing this resolution pushes the entire industry to keep up and it's not hard to imagine a time where all higher-end tablets and even laptops have Retina-caliber displays. I wouldn't be surprised if we get there within a year, and as a fan of things that look nice, that makes me pretty excited.

The other advancements in the new iPad are rather less groundbreaking, but that doesn't change the fact that the thing is going to be a huge seller, and the iPad 2, at \$100 cheaper, won't slow down.

That wasn't the only news from the event, with Apple unveiling some great new iOS apps, including a mobile version of iPhoto that is surprisingly powerful even for reasonably serious photogs — if they can find a good way to get their pics in the tablet.


Apple also upgraded the AppleTV, moving it

up to 1080p support. It's a natural update since the iPad itself now supports 1080p content, but still no sign of a proper TV from Apple.


There was one last interesting bit to the event that came at the tail end of things. Tim Cook closed by saying "We're just getting started" while standing before a slide that said "2012: There's a lot to look forward to." It's almost as if Apple was saying "Okay, so this announcement was maybe just a little tame, but we have some really good stuff coming. Promise." With two predominantly evolutionary product launches down, maybe it's time to start expecting something truly bonkers for the next. An Air-thin MacBook Pro with a Retina display? That's my pie-in-the-sky wish.

Now, you might not believe it, but there was some *other* news in the tech world this week, particularly from the gaming front since the Game Developer Conference is going on — across the street from Apple, interestingly.

Storied game producer Peter Molyneux of Lionhead Studios, the creative voice behind the *Fable* series among many other amazing titles, stepped away from his role at Microsoft to found a new outlet called




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caliber displays.**

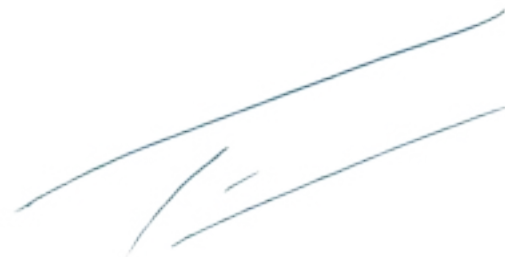


22 Cans. No word on what the Bullfrog veteran will be cooking up next but we have it on good authority that it will be slightly kooky and potentially zany.

Also on the gaming front, Sony announced the release of a beta SDK for developers who would like to push games to the PlayStation Suite. It's free for now but titles developed through the full \$99 version (which arrives "later this year") will be eligible for deployment through PlayStation Certified

phones and the PS Vita as well. That's good news for owners of such devices, but we can still think of a couple-dozen original PlayStation games we'd like to see ported over first.

In this week's Distro we're naturally going to give you the run-down on the new iPad, but there's a heck of a lot more than that. We have an amazing piece from our resident globe-trotter Darren Murph, talking about the challenges of bringing broadband to the masses and, in a related feature, we'll give you a look at just how many frequent flier miles the Engadget team collectively racked up last year. We have Dante Cesa's review of the revolutionary Lytro camera, my take on Dell's evolutionary Dell XPS 13 Ultrabook, Ross Rubin discusses where the new iPad fits in and Apple co-founder Steve Wozniak sits down for our Q&A. You won't want to miss it and, if you've managed to get this far, you shouldn't have to. Enjoy. 



TIM STEVENS  
EDITOR-IN-CHIEF,  
ENGADGET





# GLOBE TROTTERS

The 2011 Travel Habits of Engadget's Senior Editors



\*  
ENOUGH  
TO CIRCLE  
THE GLOBE  
25 TIMES



27 COUNTRIES  
191 CITIES



12  
EDITORS

DANA WOLLMAN  
MYRIAM JOIRE  
AMAR TOOR

MICHAEL GORMAN  
DARREN MURPH  
RICHARD LAWLER

RICHARD LAI  
BRIAN HEATER  
CHRISTOPHER TROUT

TIM STEVENS  
DON MELANSON  
ZACH HONIG

*The Weekly Stat*

# THE IPAD'S LANDSCAPE ORIENTATION

*Switched On***BY ROSS RUBIN**

*Ross Rubin (@rossrubin) is executive director and principal analyst of the NPD Connected Intelligence service at The NPD Group. Views expressed in Switched On are his own.*

Operating system advances have in many ways driven the two major classes of tablets seeking to grab a share of the iPad's market. Windows 8 will bring the new Metro user interface and ARM support to allow the PC-class to scale down. While Android 4.0 unifies the platform's tablet and smartphone operating systems, encouraging it to take better advantage of the larger screen capabilities, and scale up. ¶ Indeed, the full potential of the new iPad won't be known until the next release of iOS, as is typical of Apple's historically tight pairing of hardware and software; that other shoe will likely drop at its developer conference in June. Despite the lack of a new operating system or form factor, the third-generation iPad and its now price-reduced predecessor have set the stage for how Apple plans to defend against Android and Windows tablets.

## The View from Above

**For a company with such a rich software history, Microsoft challenges the iPad with Windows tablets that seem to rely more on bits than atoms. In offering form factors that**

can function as both a notebook PC and a tablet, manufacturers have a powerful marketing message that the best tablet is the one you don't have to buy as a second device. On the software side, however, Microsoft is arguably asking Windows developers to make at least as great a shift between the classic Windows user interface and Metro as Apple has between the Mac and iOS. Apple's recent announcements better prepare the company for this challenge in three ways: bolstering the device's processor, improving its first-party productivity and creativity applications, and showcasing how increasingly sophisticated apps such as Sketchbook Ink and




# It is a level of favoritism that Google and Microsoft can never have for any given device...

iPhoto can take on tasks previously reserved for the PC.

## The View from Below

That third tactic will also be effective in defending the tide of tablets that Google hopes will rise up from the Android smartphone army. After all, the storage-deficient and camera-lacking Kindle Fire, the most successful iPad competitor to date, could hardly be positioned more as an exclusive content consumption device in the tradition of its e-paper-based forebearers. But mostly it is the iPad 2's new lower price that will be Apple's defense against Android. While its \$399 price point won't lure many price-conscious Kindle Fire buyers, it does put renewed pressure on other Android tablet makers that have seen their 10-inch offerings slip into that price range.

## The View from Within

Apple's greatest defense against competitors, though, is not about improved specs or lower prices, but more about how it sees the iPad. iPad apps shown at this week's event, including iPhoto, with its engaging user interface, and GarageBand, with its novel networked Jam Session feature, show how Apple considers the iPad not as another PC form factor or opportunity for developers to spruce up a smartphone app incrementally, but rather as something special and unique. It is a level of favoritism that Google and Microsoft can never have for any given device running their licensed software. Apple's success in communicating that passionate perspective with developers and consumers has not just fueled the marketplace success of the iPad, but its products in general. 



# I'm Being Followed: How Google — and 104 Other Companies — Are Tracking Me on the Web



by Alexis Madrigal  
*The Atlantic*

The fact that advertisers are following what you do on the web likely isn't much of a surprise to most, but the extent of that tracking may well be. Alexis Madrigal recently attempted to get to the bottom of things, and the result is an in-depth look at just how many companies are tracking you, and what it all means. Also worth reading is Madrigal's follow-up piece on how the deceptively simple *Drudge Report* website is using state-of-the-art advertising tools.

## AROUND THE WEB

### TED and Meta TED: On-Scene Musings From the Wonderdome

by Steven Levy

*Wired Epicenter*



This year's TED conference sparked a fair bit of debate before a single speaker even took the stage (see Nathan Jurgenson's "Against TED" essay recently featured in this section), but what of the event itself? Steven Levy reports on the proceedings with an eye towards the meta for *Wired*.

### Are Smartphones Changing What It Means to be Human?

by Janelle Nanos

*Boston Magazine*



How do our interactions with technology change as our smartphones and other devices become smarter and smarter? *Boston Magazine's* Janelle Nanos tries to answer that question by looking at some of the latest developments, with some additional insight from the likes of MIT's Sherry Turkle.

### Lord of the Files: How GitHub Tamed Free Software (And More)

by Robert McMillan

*Wired Enterprise*



The open source repository GitHub recently made news after it was hacked by one of its own members, but the fact that such a hack received so much coverage is also a testament to the site's growing prominence. Here, Robert McMillan looks at just how it arrived at its current state and what's in store for its future.

*Recommended Reading*



# Lytro Camera Review

BY DANTE CESA

Lytro's debut camera only shines when taking well-lit pictures with multiple layers of focus. In its current incarnation it's an accessory, but we suspect it's only a matter of time before all cameras work this way.



## DON'T LET THAT CUTE DESIGN FOOL YOU.

Lytro, the world's first commercial light field camera, is the culmination of nearly twenty years of research — a project that once occupied an entire wall facade, and has since been miniaturized into something that fits in the palm of your hand. An impressive feat, sure, but not as arresting as the end result: the ability to refocus pictures, even after you've taken them.

To achieve such magical endeavors, the Lytro camera uses heaps of custom software (armed with a custom .lfp file format) coupled with some serious silicon to measure not just color and the intensity of light, but its direction, too. The latter is achieved with an eleven “mega-ray” sensor, which is bolted to an f/2.0 8x optical zoom lens, all encased within that sleek body. Seeking to save us from unfocused mishaps, the technological tour de force also unlocks some considerable creative potential. So, is the \$399 shooter going to revolutionize photography as we know it? Or does Lytro's first foray into consumer electronics fall prey to the shortcomings of a 1.0 product?

### Hardware

Despite the inherent complexity stuffed within, the Lytro camera's exterior couldn't be more simple. That's high-praise: it isn't often that we encounter a

product quite this refined, so minimalist in its sensibility.

**IT FEELS AS IF LYTRO'S ENGINEERS WERE INCAPABLE OF CLOSING THE CHAPTER ON THEIR MASTERPIECE UNTIL THEY STRIPPED IT OF EVERYTHING BUT THE ESSENTIALS.**

This seems that much more impressive, too, when you remember this is the work of a startup — one unveiling its first piece of hardware, at that. Other CE makers just got put on notice.

But let's delve deeper into the intricacies of what makes this thing tick. The design is a jarring blend of metal and rubber, and the overall effect is nothing short of striking. For starters, we have an anodized aluminum barrel, which houses the f/2.0 8x optical zoom lens. That, in turn, is fused to a rubberized

cube where the sensor, various electrics and touchscreen all reside. It's worth noting that the rubber portion is where you'll spend all your time, as that's where all of the spartan controls live. Things like a shutter button and capacitive-touch zoom slider up top, followed by a power button and a micro-USB door directly opposite on its bottom.

Completing the tour, let's turn our attention to the 1.46-inch touchscreen adorning the back side. Despite its premium glass construction and responsive performance, Lytro doesn't quite make up for the poor quality of the display itself. Some of that disappointment stems from its unimpressive 128 x 128 resolution, sure, but more worrisome is its tendency to wash out as soon as you turn it ever-so slightly off-angle.

That's a problem because pulling off those cool depth-of-field shots means more often than not you'll be contorting the hardware at odd angles. We also took issue with its performance in bright light — get used to creating shade with your hand cupped to the unit as you try to frame shots out in the wild.

Having a poor display on a piece of photographic kit would normally be a bummer, if not a deal-breaker. Ultimately, though, it'll hit you that the camera workflow you've been practicing for your entire life doesn't necessarily apply here. Soon enough, you'll stop worrying about focus, and realize Lytro liberates you to dwell on composition and exposure, the latter of which you can tweak by tapping the screen.



Okay, not everyone will be comfortable adopting the “shoot first ask questions later” mantra, but that's how we generally used it outdoors — a habit made sweeter with the help of some fast shutter releases. Naturally, your mileage will vary depending on your technique (human skills still do count for something here), but as we'll explain, we were more than happy with the results, so long as we had adequate lighting at the ready.

## User Interface

If we're honest, the current user state of camera interfaces is pretty abysmal. Years upon years of crud, including leftovers from directional-driven UX, do not a happy Engadget reviewer make.





**THANKFULLY, LYTRO'S  
THROWN CAUTION TO THE  
WIND AND STARTED ANEW,  
ADOPTING THE SAME  
SIMPLISTIC APPROACH ON THE  
INTERIOR AS ON ITS EXTERIOR.**

For starters, taking photos is as simple as waking the unit (either by pressing its power or shutter button) and pressing the shutter to take a picture. To zoom, slide your finger along the capacitive zoom bar up top. Swiping up on the touchscreen reveals that dock you see above, with three tappable icons, which enable “creative mode” (more on that in a bit) and show remaining storage and respective battery capacities. That

gesture also reveals a Settings icon (the cog in the upper right corner), which is where you’ll find the About, Delete All and Factory Reset menus.

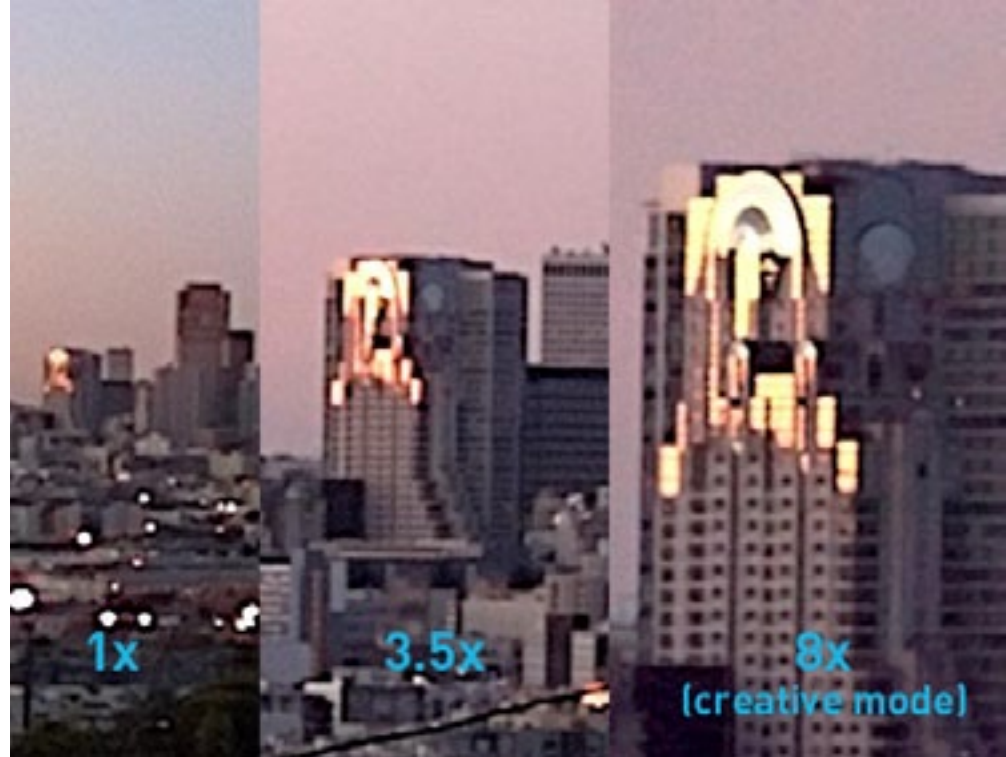
Before we get ahead of ourselves, let’s talk a little bit more about creative mode, the only alternative shooting setting this camera offers. Tuned for finer control, in this mode the camera is less worried about maximizing a shot’s future refocus potential — essentially a fancy way of saying it’ll now let you take much closer macro shots with a shallower and flatter depth of field, which means less of that Lytro-refocusing magic applies later. Getting started, you’ll know it’s active thanks to an onscreen blue border. Creative mode gives you access to the full range

of the camera's optical zoom (8x versus the "Every day" mode's 3.5x) in addition to enabling tap-to-focus (instead of the default mode's more restrictive tap for exposure).

Once you've actually taken a shot, viewing your creations is as simple as swiping to the left. From there you can continuously swipe left back in time, or right to return to the viewfinder. Thankfully, if you've perused through a lot of photos, you don't have to endlessly swipe to get back into capture mode — one press of the shutter button and you're ready to start capturing again. Sliding across the zoom bar while viewing those creations reveals a 3 x 3 grid view, similar to how most digital cameras manage photos these days. And if you swipe upward while viewing a single photo, the same dock appears as before, except this time you've got a delete button occupying the leftmost spot where creative mode lived.

## Image Quality, Performance and Battery Life

Ultimately, it's of no consequence how beautiful the hardware or onboard software is if a camera fails at its one purpose: taking pictures. With Lytro things are a little complicated in this department, insofar as the camera excels in certain situations, while putting on a mediocre performance in others. Before we walk you through the results, it's worth setting the expectation that you won't be getting any poster-sized prints here. Shots from



the Lytro camera have 1080 x 1080 resolution — good enough, the company says, for 5 x 7 prints.

Well-lit snaps with two or more layers of focus are really where Lytro comes into its own. With proper lighting, colors are vibrant and generally accurate across the range, and Lytro had no problem conquering more tricky shots with highlights and shadows. Unfortunately, we can't say the same about



well-lit, but focally flat long distance or landscape shots, where pictures consistently lacked sharpness and detail. If you're into depth-of-field shots, the Lytro's a worthy companion; just be cognizant you won't be sending your current shooter to the graveyard.

Unfortunately, things don't get better when it comes to low-light performance. Yes, in theory, that wide  $f/2.0$  aperture lets a lot of light in, but prepare yourself for copious amounts of noise. High-contrast shots taken during a beachside hike passed, but more often than not you'll have to sift through quite a few iffy shots with copious noise before finding an acceptable one.

On the upside, though, shutter performance and zooming are both much better. Booting is near instantaneous and first captures, with their reassuring click, are ready to go less than a second later. Shots thereafter continue at a rapid clip — speedy enough, certainly, for us to catch waves breaking or a cat mid-yawn. Of course, this isn't rapid-fire shooting on the order of a DSLR, but the quick reflexes of Lytro's camera is still worlds better than most smartphones and, we'd hazard, most point-and-shoots as well. Image quality when zoomed at full bore (in creative mode, naturally) is relatively good, and, as an added bonus, all that lens movement

happens within the unit's barrel, meaning there's no lens protrusion here.

As for battery life, we don't have any complaints either. You should get at least a day trip's worth of photos from the on-board lithium-ion battery. We're talking anywhere from 200 to 300 shots per charge, which, considering the onboard processing, we found perfectly within the range of acceptable. Charging is a strict micro-USB-only affair, although for those travelling sans computer, we're told there's a forthcoming (yet unpriced) optional fast charger, which should cater to the more serious Lytro enthusiast.

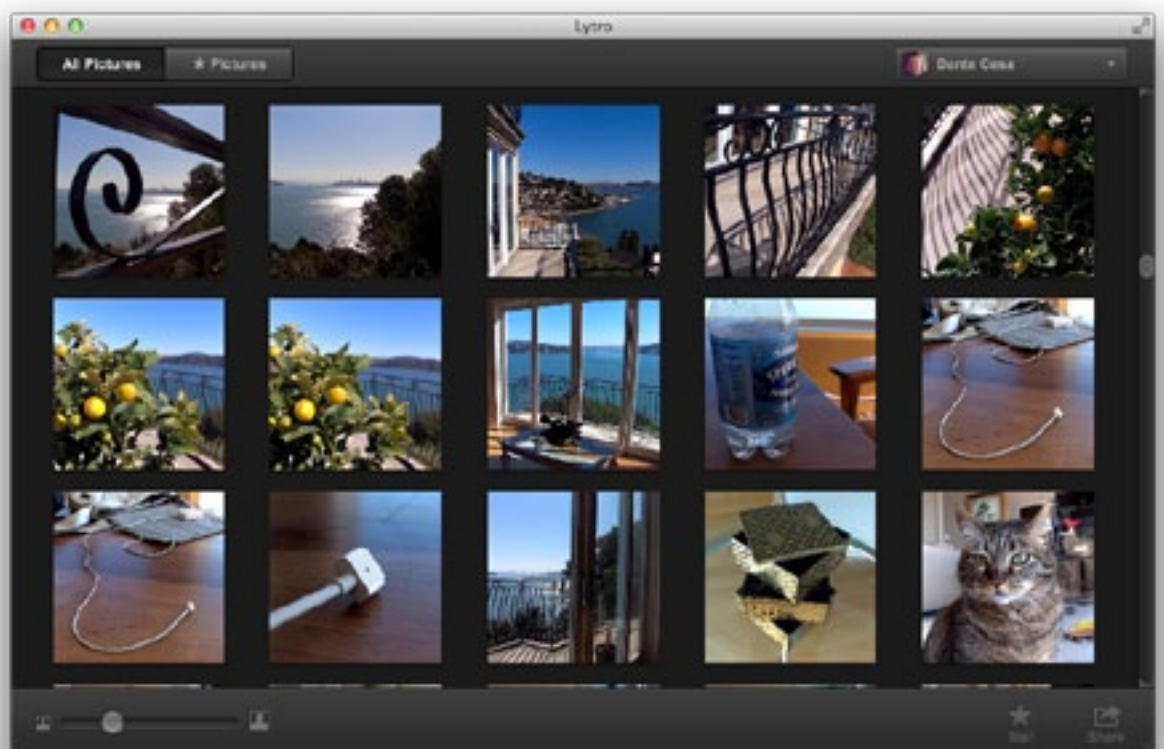
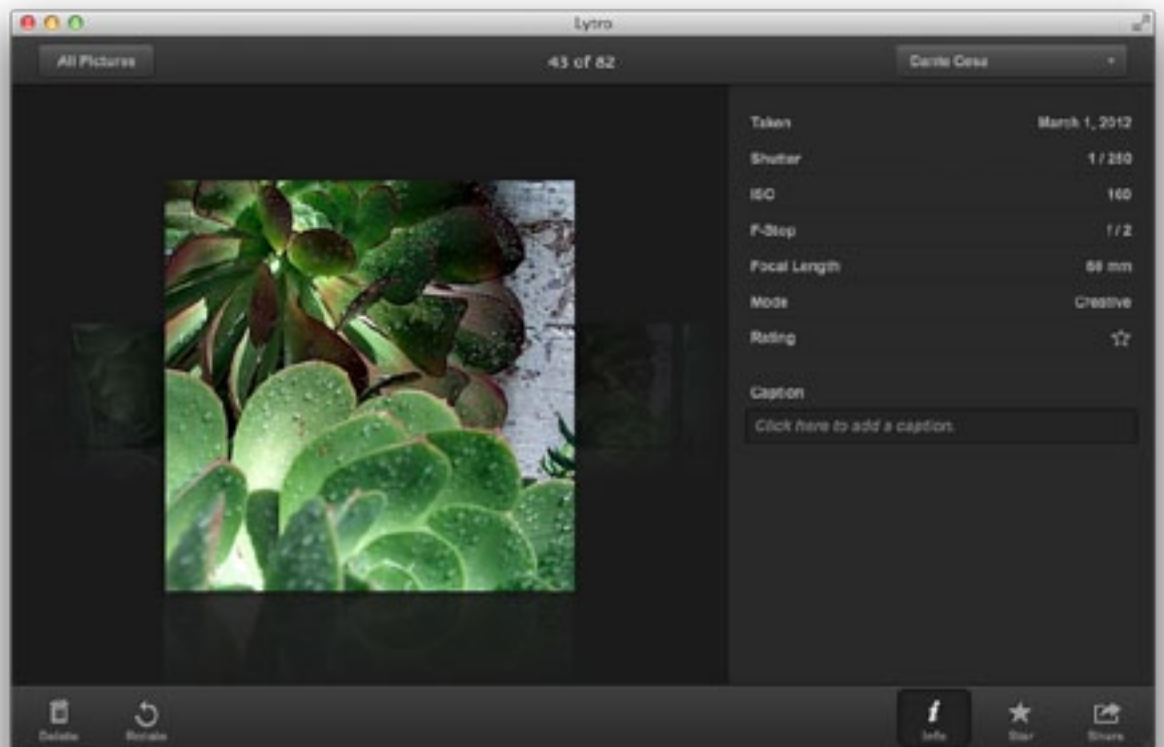


## Software

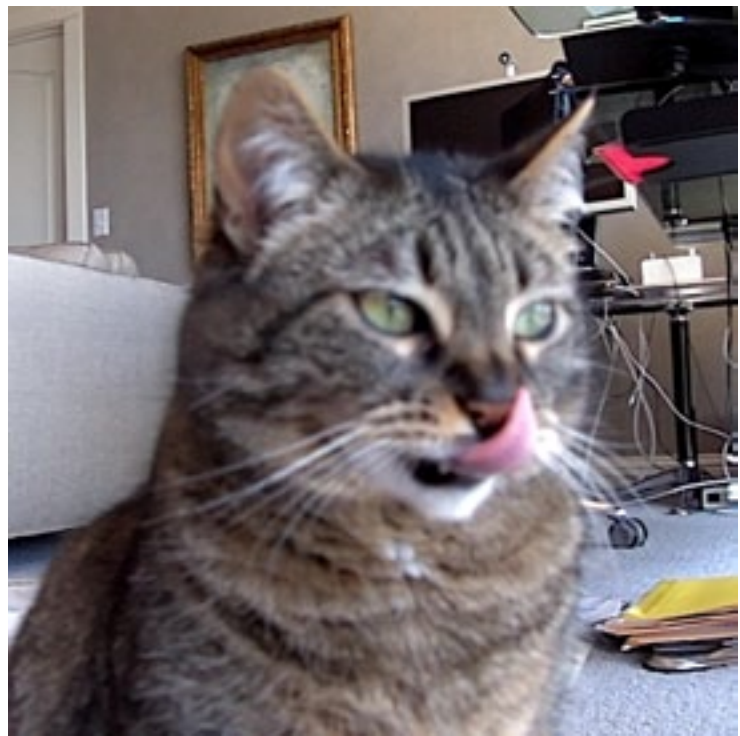
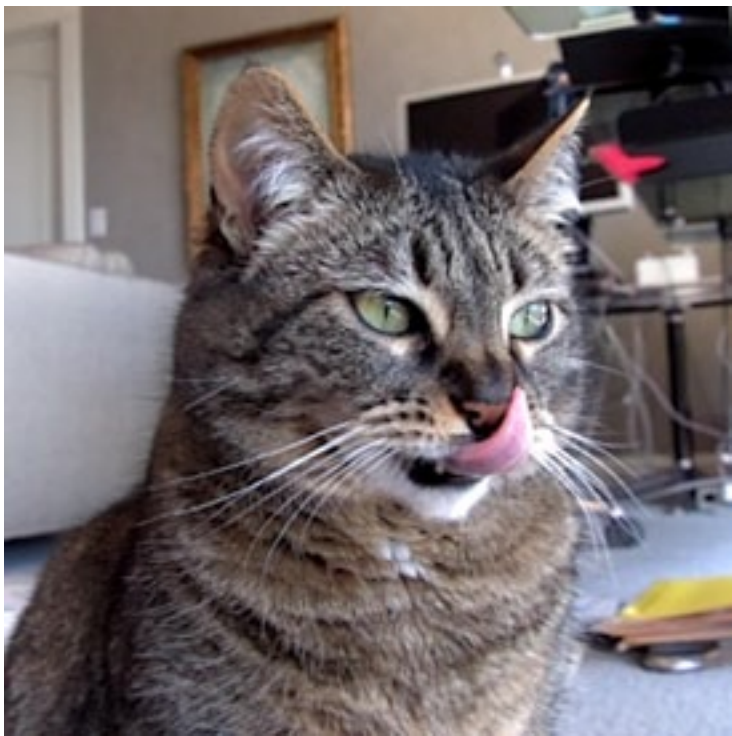
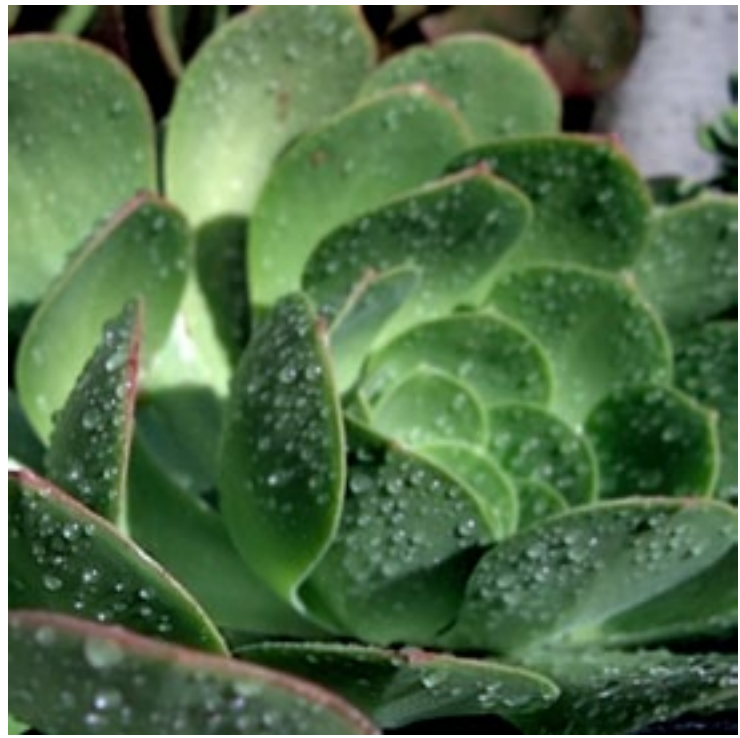
You might have missed the passing reference in our intro, but the Lytro camera doesn't output your run-of-the-mill JPEG. Instead all that directional light information is stuffed into a custom format the company calls a "Light field picture file," or .lfp for short. Ergo, to do anything with a picture that originated from a Lytro camera, you'll naturally need the company's home-grown desktop application. The good news is the installer's pre-loaded on the camera — just plug it in and follow the prompts to make your way through the installer package. But we hope you also caught that installer package nuance, as here comes the bad news. For now, Lytro's desktop software is Mac only (requiring 10.6.6 or above), although the company says a Windows version will follow at some point this year.

Upon firing up the desktop software for the first time, you'll be informed you must complete a one-time backup of the camera's internals before proceeding. It's unclear to us what exactly

is being backed up (not photos, that's for sure) — but the company did tell us this happens once every time you plug the camera into a different machine. After conquering the backup, .lfp files start copying to the disk (with previously starred images given first bidding) while the suite simultaneously begins processing each RAW-like .lfp into something the desktop suite can digest. You'll know when the process-











ing is complete, as one by one, grayscale thumbnails give way to color replacements, which means they're ready for some TLC, courtesy of the suite's rudimentary editing chops.

When it comes to editing, all you can really do with the software is refocus to your heart's content (by clicking different spots in the picture), actuate image rotations and bring up additional info on a capture with more in-depth data (like shutter, ISO, focal length and aperture values). That might not sound like a lot, and it isn't, but Lytro promises it'll quickly iterate with new features over time. And because those .lfp

files are untouched, new functionality like the previous tech demos the company has shown (like shifting perspective and making images all-in-focus) will come to photos you've taken today in a future release.

The final piece of the software puzzle relates to sharing. Upon logging into a Lytro.com account, one can upload captures to their own gallery on the company's website. Pictures uploaded can be publicly visible or private and additionally the desktop software supports direct uploads to a connected Facebook account. Choosing the latter creates an inline "living" Flash-powered embed on



the social network, which friends can then interact with by refocusing inline on Facebook to their hearts content. Additionally there's support for Twitter and HTML embeds, although you'll have to navigate over to the intended picture in the Lytro gallery portal and click share buttons to complete those tasks from your browser.


Finally, those looking to get their old school sharing on, can export JPEGs from a secret option in the desktop software, which only rears its head when you right-click on a thumbnail. Sneaky.

### Wrap-Up

While there's so much right with Lytro's debut shooter, it will, even at its best, be no more than another accessory living in your camera bag. Although we're smitten by its delectably simple UI and gorgeous hardware (its washed-out screen not withstanding), its inability to shine in limited shooting conditions means you'll never be able to just make the Lytro your sole photographic companion.

That's saddening — it's obvious Lytro's onto something huge, and we're impatiently awaiting the day when cameras of all sizes make use of the technology on display here. Whether the company will realize our dream by building out a full line of Lightray-equipped cameras remains to be seen, but with a such a solid technical and groundbreaking foundation, things can only get better.

The end game is long and these are

the earliest of days. For the photography aficionados in the audience, \$399 is chump change compared to the kinds of glass in your collection, making Lytro a no-brainer and worthy companion of space in your camera bag. For the rest of us, though, patience is a virtue. 

*Dante's been tinkering with gadgets since age four. If he's not yodeling, he's out aimlessly wandering in SF.*

## BOTTOMLINE

### Lytro Camera

\$399

#### PROS

- Refocuses images after the fact
- Stellar build quality
- Simple but intuitive UI

#### CONS

- Low resolution (~1MP) captures
- Poor screen
- Iffy low-light performance

**Lytro's debut camera only shines when taking well-lit pictures with multiple layers of focus. In its current incarnation it's an accessory, but we suspect it's only a matter of time before all cameras work this way.**



# Dell XPS 13

BY TIM STEVENS


**Dell's XPS 13 is one of the best looking Ultrabooks we've seen yet, but isn't necessarily the best Ultrabook.**

**You don't have to be** a marketing skeptic to agree that “Ultrabook” is a somewhat hyperbolic term for a class of devices designed a little thinner, a little lighter and maybe a little quicker than those notebooks that have come before. From a pure hardware standpoint there's nothing particularly “ultra” about them when compared to a standard Wintel lappytop, but manufacturers are, thankfully, using this as an opportunity to raise their game on another front that's becoming increasingly important in the world of portable computing: aesthetics.





## That Dell took the time to design a metal flap just to hide unsightly logos and stickers says a lot about the attention to detail here.



Compared to clunky laptops of yore, many Ultrabooks mark a truly massive step forward when it comes to purity of design and Dell is showing some impressive chops with the new XPS 13. But, when you're buckled in to coach class and it's time to get to work, looks are less important than having a solid laptop that performs. Does the new XPS have the brawn to match its beauty? Let's find out.


### Look and Feel

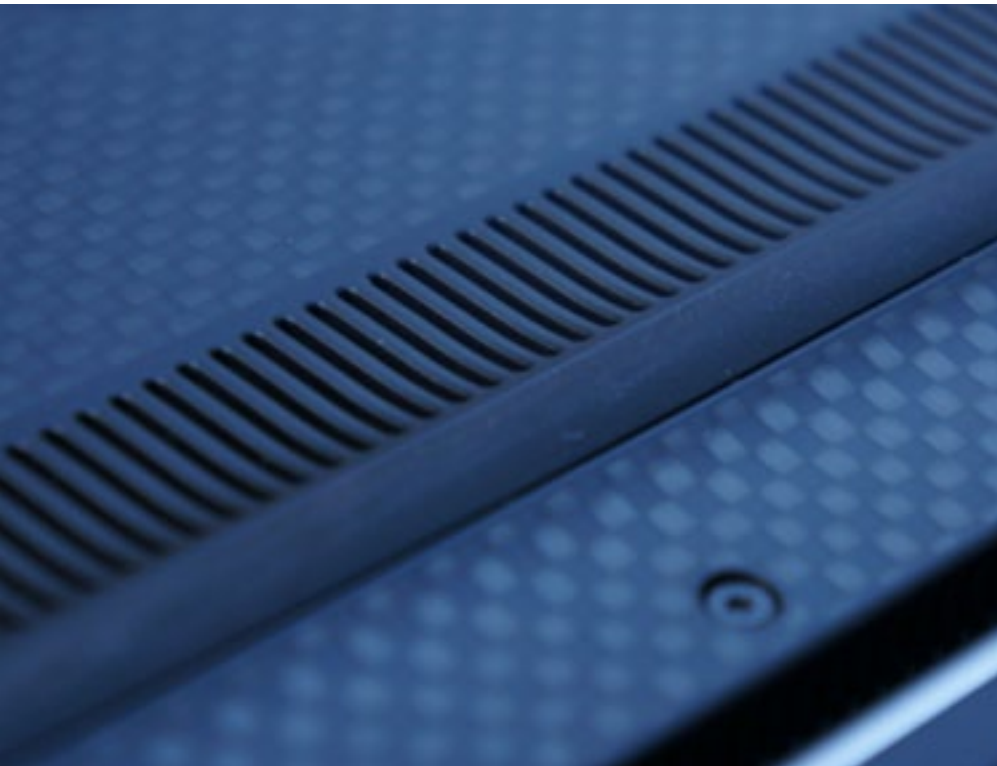
Right out of the box it's clear Dell is trying to make a statement with the new XPS 13. Simple, dark, minimalist packaging contains the sliver of the laptop itself — and an unfortunately clunky power brick. The 45-watt adapter is smaller than many others Dell makes, but it's outfitted with a fat, three-pronged power cable that makes the

thing take up a huge amount of space in your bag. If PC makers are going to get really serious about going after Apple with slinky laptops, they're going to have to come up with some slinkier power adapters to match.

Ignoring that bit of standard-issue fare, the XPS 13 makes a great first impression. If you've been following along, you'll notice it dispenses with many of the gaudy embellishments that made the XPS 14z and 15z so polarizing, with only the fingerprint-free metal lid and pillowy keyboard tying it all together. Its lid is of satiny aluminum with a sandblasted sort of appearance, embossed in the middle with a glossy, 1.5-inch Dell logo. The bottom, though, is even more alluring. Protected beneath a thin rubberized coating is a carbon fiber construction that feels fantastic. You don't have to be a motorsports nut to appreciate the look of a fine carbon weave, and with the soft-touch coating it creates a surface that's reassuringly easy to hold onto when you're wandering around the office trying to find your next meeting.

That grippability is further aided by a pair of rubber feet that run the width of the bottom of the unit, one on the front and the back. These also do a fine job of keeping the laptop in place when typing furiously in said meeting, elevating the thing slightly so that the ridge of air vents on the bottom can do their thing. And they seem to do their thing well. We never noticed an excessively warm lap thanks to our Core i5-equipped unit.





Inset amid that lovely weave is another bit of brushed aluminum, a metal plate with “XPS” menacingly present. (We think this logo would make for far more interesting lid decor than that somewhat overly friendly Dell circle with its quirky E.) Flip this flap open and hidden below is the ugly Windows product key sticker along with about a million certification logos (FCC, etc.). That Dell took the time to

design this metal cover just to hide all these unsightly logos and stickers says a lot about the attention to detail here.

Try to open the laptop, though, and you’ll realize some further attention was needed elsewhere. There’s a somewhat stiff hinge, which isn’t necessarily a problem (you certainly don’t have to worry about it separating on its own), but actually getting it open can be a bit of a challenge. Stick a finger under the





lip of the lid and, when you start to lift, the laptop will start to flip over before opening. And that's not because it's a particularly light little thing. In fact, at just under three pounds, it's actually fractionally heavier than the physically larger 13-inch MacBook Air.

Get it open and you're presented with a backlit, island-style keyboard, black semi-gloss keys raised over a matte background and situated above a similarly dark touchpad, power button to the upper-left.

At 2.99 pounds (1.36kg), the XPS 13 is in good company among the 2.96-pound MacBook Air and the 2.9-pound ASUS Zenbook UX31, though none of these are quite as impossibly light as the Toshiba Portege Z830, which weighs a mere 2.47 pounds. Certainly, Dell's entry bests the HP Folio 13 (3.3 pounds), along with the 13-inch Samsung Series 5 Ultrabook (3.5 pounds) and the untold number of 14-inches we'll see this year.

Available ports are predictably lim-

**After using the keyboard for a few days we found ourselves neither loving nor hating it, but we did lean toward the latter when it came to the trackpad.**

ited, but comprehensive enough. On the left are a 3.5mm headset jack, USB 2.0 port and the power input. On the right is a USB 3.0 port and a Mini DisplayPort, plus a series of five little white LEDs that will give you the battery's current charge at the press of a button. And that's it. Dell went the way of Lenovo and sadly opted not to include an SD card reader, which we would consider an oversight.

### **Keyboard and Trackpad**

Following in the footsteps of the XPS 14z and 15z, the keys here are small but comfortable, feeling slightly tall and springy, but not overly so. There are no dedicated media keys at your disposal; the various F keys doing double-duty with the help of the Fn key nestled between Ctrl and the Windows logo key. All told, it feels like a step up from the shallow 'boards you'll find on



so many other Ultrabooks, such as the UX31 and Acer Aspire S3.

After using the keyboard for a few days we found ourselves neither loving nor hating it, but we did lean toward the latter when it came to the clickable trackpad. It too has a soft-touch feel to it, which makes it a bit sticky as you try to gesture. We could live with that if it were responsive enough. We cranked the sensitivity as high as we could in the Cypress TrackPad settings, which helped to some degree, but it still felt unpredictable and unreliable.

We particularly had issues when clicking, as the slight movement of our fingertip when depressing the trackpad would cause the cursor to jump. Instead of simply placing the text caret

we'd wind up highlighting a full row of text. This happened over and over again regardless of how precise we tried to be.

## Display and Sound

This is, again, a 13-inch laptop. While there are multiple choices for processor and disk size there's but one display on offer, a 1366 x 768 unit that manages to do greater than 720p, but not by much. It is a 16:9 aspect ratio display, so the panel itself is slightly shorter and wider than that on the 13-inch MacBook Air, despite the XPS 13 itself being slightly narrower.

Yes, indeed we have some skinny bezels here, but sadly we're also talking about a screen that has a lower pixel density than the 1600 x 900 panel on



## The speakers are good enough that you can leave your Jambox at home.

the \$1,100 UX31. (The Air has a 1440 x 900 display, but you'll pay \$1,299 and up for the privilege.) It's not a massive difference, but individual pixels are far more noticeable on the Dell.

The contrast of the display doesn't exactly impress either. Get perfectly on-center and it's adequate, but stray more than a few degrees to either side and it quickly begins to fade. This is a particular problem when you're looking down from above, as you're likely to be when sitting upright with this guy on your lap. The hinge doesn't let you lay the screen flat enough and you're often stuck with a decidedly pasty image.

We were, however, quite impressed by the integrated speakers — surprisingly so. Even at moderate levels the laptop easily filled a hotel room with adequate sound and, when cranked, managed to become uncomfortably loud. This will not beat the quality of even mid-range cans or earbuds, but it's certainly good enough that you can leave your Jambox at home.

### Performance

Our base-spec XPS 13 contains a 1.6GHz Intel Core i5-2467M proces-

sor with 4GB of RAM and we found it to be more than adequate for general computing tasks, including writing this very review. It was quite snappy and responsive navigating through Windows, playing videos, listening to music and, in general, computing.

A cold boot is completed in a very respectable 15 seconds and the system wakes from a sleep almost instantly. A 3DMark score of 4,130 puts this in the higher end compared with other Ultrabooks, though slightly behind the UX31. We were unable to get Vantage to execute successfully.

### Battery Life

Our XPS 13 and its six-cell, non-removable battery soldiered through our standard battery rundown test of videos looping endlessly for a respectable four hours and 58 minutes before succumbing to exhaustion. That's a half-hour longer than the last XPS we reviewed could manage, the XPS 15z, and a full two hours more than 2010's XPS 14. But, looking at a more direct competitor, it lags about an hour behind what HP's Folio 13 managed on the same test.

Of course, your computing tasks might not entail simply looping videos endlessly, and indeed ours don't either. With the WiFi on and connected and the screen set to a moderate brightness we managed almost six hours on a charge of light web surfing and document editing. Lose the WiFi and you could surely do well better,

BENCHMARK	PCMARK VANTAGE	3DMARK06	BATTERY LIFE
Dell XPS 13 (1.6GHz Core i5-2467M, Intel HD Graphics 3000)	N/A	4,130	4:58
HP Folio 13 (1.6GHz Core i5-2467M, Intel HD Graphics 3000)	6,701	3,387	<b>6:08</b>
Toshiba Portege Z835 (1.4GHz Core i3-2367M, Intel HD Graphics 3000)	5,894	3,601	5:49
Lenovo IdeaPad U300s (1.8GHz Core i7-2677M, Intel HD Graphics 3000)	9,939	3,651	5:08
ASUS Zenbook UX31 (1.7GHz Core i5-2557M, Intel HD Graphics 3000)	<b>10,508</b>	4,209	5:41
Acer Aspire S3 (1.6GHz Core i5-2467M, Intel HD Graphics 3000)	5,367	3,221	4:11
13-inch, 2011 MacBook Air (1.7GHz Core i5-2557M, Intel HD Graphics 3000)	9,484	<b>4,223</b>	5:32 (Mac OS X) 4:12 (Windows)
2011 Samsung Series 9 (1.7GHz Core i5-2537M, Intel HD Graphics 3000)	7,582	2,240	4:20



though we're thinking Dell's estimate of eight hours and 53 minutes is a bit optimistic for most usage situations.

### Software

It's hard to take a premium laptop seriously when it's constantly nagging

with trialware pop-ups in your face. Those annoyances set a lasting impression, and it isn't a good one. With previous XPS models we've found ourselves shaking our heads as we scrolled through the Programs listing, but we're happy to report Dell has kept things respectably clean with the XPS 13.

McAfee SecurityCenter is here and probably the most nagging app that's pre-installed, prompting you to hop online and activate it. There is also a solid complement of Dell applications for controlling the webcam, creating recovery media and backing up the laptop. That too throws up an annoying pop-up after you boot, but it's only suggesting you create a recovery media, something that is a good idea. The only slight complication is that, by default,





the DataSafe app wants to write that stuff to disc, something the XPS is ill-equipped to do out of the box. Thankfully it can also write to USB drives, should you have one big enough.

### **Configuration Options and the Competition**

On the inside, again, is an Intel Core i5-2467M processor clocked at 1.6GHz and paired with 4GB of RAM. Configured with a 128GB SSD this laptop would cost you \$999, a price we consider reasonably fair. However, step up to the 256GB model with a Core i7-2637M processor and you're looking at a somewhat less wallet-friendly (though still fair) \$1,499.

That said, both options compare

favorably to the competition, at least from Apple's camp. Though higher-res, the 13-inch Air comes in at \$300 higher than the \$999 XPS 13 and, if you move up to a 256GB SSD, you're looking at \$1,599 — and that's still with a Core i5 processor. Still, raw specs aren't everything, and it's worth bearing in mind that for \$1,299 you get a skinny laptop with a comfy keyboard and reliable trackpad — a combination we can't say we've found in any of the Windows-based Ultrabooks we've tested so far.

However, the lowest-end of HP's Folio 13 Ultrabooks comes in at about \$100 cheaper than the XPS 13, and starts with a Core i5 processor, 128GB SSD and display that suffers from the same issues as the XPS 13. If you're looking for the

value leader, at \$900 that's still the one.

At that rough \$1,500 price point the XPS 13 sits about on par with the highest-end Lenovo IdeaPad U300s, which also comes with 256GB of storage and a somewhat disappointing display. (The U300s is also missing an SD reader, but it makes up for it somewhat with an elegant design and one of the more ergonomically sound keyboards we've tested.) But, if you're looking for something in this category with a genuinely good display, right now it's still the \$1,099-plus UX31 that's taking the cake — or, of course, the Air. As always, though, we'd be remiss if we didn't remind you the UX31's fast performance, healthy battery life, gorgeous design and high-res display all come at the expense of one sticky, shallow keyboard.

## Wrap-Up

From the moment it comes out of the box the XPS 13 looks and feels like a truly premium product and, with a nice keyboard and respectable performance, it's a nice machine to use, too. But, the display suffers the same complaints we've seen with other Ultrabooks in this price range — middling resolution, poor off-angle contrast — and the trackpad only works well when it feels like it.

It is, then, another solid choice at the sub-\$1,000 price point, but put aes-

# BOTTOMLINE

**Dell  
XPS 13**

**\$999+**


## PROS

- Lovely, sophisticated design
- Good performance
- Powerful speakers

## CONS

- No SD reader
- Mediocre display
- Unreliable touchpad

**Dell's XPS 13 is one of the best looking Ultrabooks we've seen yet, but isn't neces-**

thetics aside and we wouldn't say it's universally better than HP's Folio 13 that's about \$100 cheaper. It is, however, better looking. 

*Dana Wollman contributed to this review.*

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*Tim Stevens is Editor-in-chief at Engadget, a lifelong gamer, a wanna-be racer, and a born Vermonter.*





*Preview*

# Forget the Numbers, This Is the 'New' iPad



**Here she is** — the iPad HD! Er, new iPad. Breaking away from the numerical tracking system used before (and still used in the iPhone range), Apple has decided to highlight the most major change in its newest slate by simply dubbing it “new.” By and large, the new guy is the same as the old

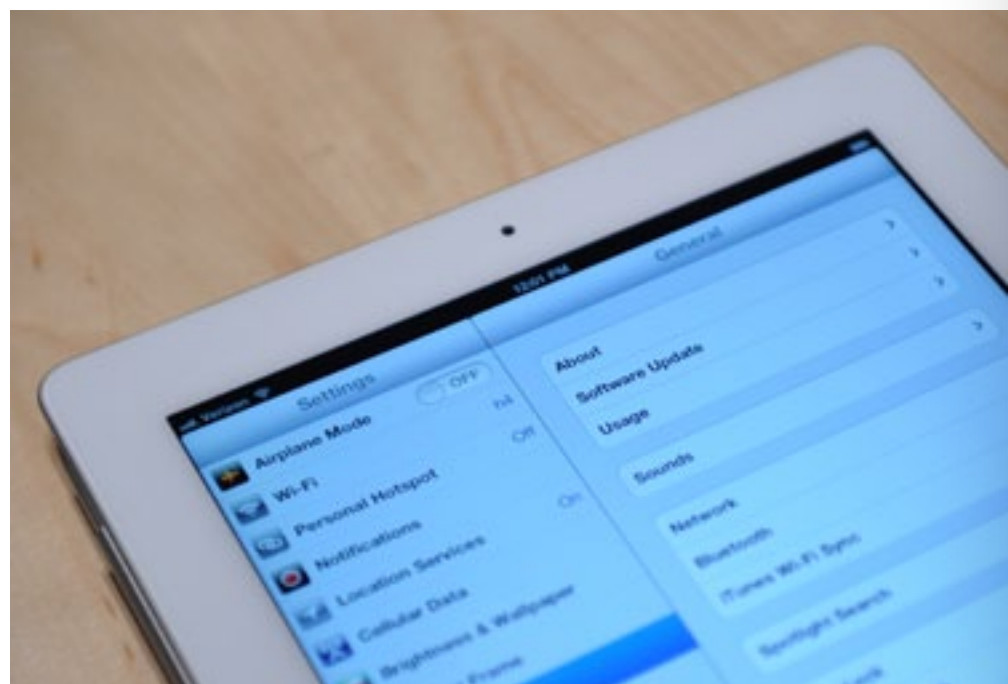


guy (Home button included), but with a few nice amenities that could very well convince OG iPad owners to upgrade.

## Look and Feel

Upon touching the HD variant, it's not the overall form factor that grabs us — it's the screen. Given that we're unashamed pixel density enthusiasts, seeing a 2,048 x 1,536 resolution display in the same area as the prior 'Pad's is stunning. Nearly two months ago, ASUS wowed our entire CES trailer with a reported 1,920 x 1,200 display on the TF700T; this, however, is something that really needs to be ogled to truly appreciate. In fact, the first viewing conjured up familiar feelings — the same that came to light when placing the iPhone 4 beside the iPhone 3G for the first time.

Unsurprisingly, Apple has managed to produce something truly beautiful to look at, and while we've yet to see the full potential of having this many pixels on a 9.7-inch slate, we're guessing a cadre of developers are already hard at work remedying that. Beyond being dazzling from a density standpoint, colors are sharp and accurate, and viewing angles



are predictably ridiculous; even taking a peek from an extreme side angle gives way to a fairly solid image with next to no washout. In terms of physical dimensions, the new iPad is ever-so-slightly thicker than the iPad 2, but we're told that "most accessories" (including the Smart Cover) should work just fine.

## Camera

Other differences? Well, the camera's been greatly enhanced; not too shocking given that: a) the iPhone 4S is sporting bolstered optics and b) FaceTime chats just won't look as sexy without a higher-res sensor to fill up that higher-res display. We weren't able to give FaceTime a run here in San Francisco, but you can





bet we will in our upcoming review.

### Voice Dictation

As for Siri? Well, it's not here *per se*, but voice dictation is a nice compromise. However, the Voice Dictation feature here *requires a web connection*, which leaves us baffled at the omission of Siri. With Airplane mode toggled on, the microphone button on the keyboard simply vanishes. In practice, though, Dictation picked up our phrases perfectly, even in a crowded room that was simply buzzing from random chatter.

### Processor

We confirmed that the new iPad has the same "CPU" as the iPad 2, but there's

dedicated silicon for the camera module and a lot more horsepower on the graphics front. The A5X adds quad-core graphics power, and while zipping through home panes doesn't feel *dramatically* faster, the bulk of the added horsepower isn't truly appreciated until you fire up a forthcoming 3D title.

### Everything Else

There's also a new ability to delete photos from Photo Stream with iOS 5.1 (a particularly pointed issue for some users), and the camera shutter button has been relocated to roughly halfway up the screen in both horizontal and vertical orientations — it's a heck of a lot more useful there. Everything else, including the headphone jack, volume rocker, mic slit and Dock Connection, remain the same as the iPad 2. We poked around in the Settings menu, and didn't see an option to disable LTE on the Verizon slate that we had in front of us; you may remember the ability to disable 3G on prior models, but it doesn't seem that those having LTE issues will be able to force themselves down to a slower network — at least not on the VZW edition.

The new iPhoto app is simply astound-




ing. It's fast, it's elegant and infinitely useful. And the tweaks that you can apply to your photos are seriously impressive; gimmicky this is not. At \$4.99, it's probably the best bargain you'll find on the App Store, particularly if you're a photo lover, and those that rely on iCloud will appreciate the ability to edit on the iPad and have the revised version simply synced into iPhoto or Aperture. As for the new iWork apps? All of those will work on prior iPads, and even the new "trailer" feature in iMovie will be operational on the prior versions.

## Wrap-Up

We can already hear the pundits cockily renaming this thing the iPad 2S, but as Apple's latest quarter has shown, people tend to spend money on even slight upgrades to existing hardware. Much like the first iPad, it's pretty tough to say what sort of market impact the new iPad will have without first waiting for developers. A few months down the road, we'll be able to more appropriately

evaluate how devs are taking advantage of the massive uptick in pixels. In fact, we're hoping for an entirely new wave of apps that will be enabled by the ability to shove so much more content onto a single screen. That said, it'll be *really* interesting to see how new apps — those designed specifically for the iPad's retina display — scale down to the display seen on the iPad 1 and 2.

There's no doubt that this here tablet feels every bit like a \$500 product, oozing quality from edge to edge and being as delightful as ever to use. Is it the second coming of the tablet? Of course not, but if we've learned anything from the iPhone 4S, it doesn't need to be. Apple just put an insane amount of real estate in the hands of crafty developers, and frankly, we can't wait to see what they cook up. 

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*Darren holds the Guinness World Record for being the most prolific professional blogger on planet Earth. He's also an argonaut.*



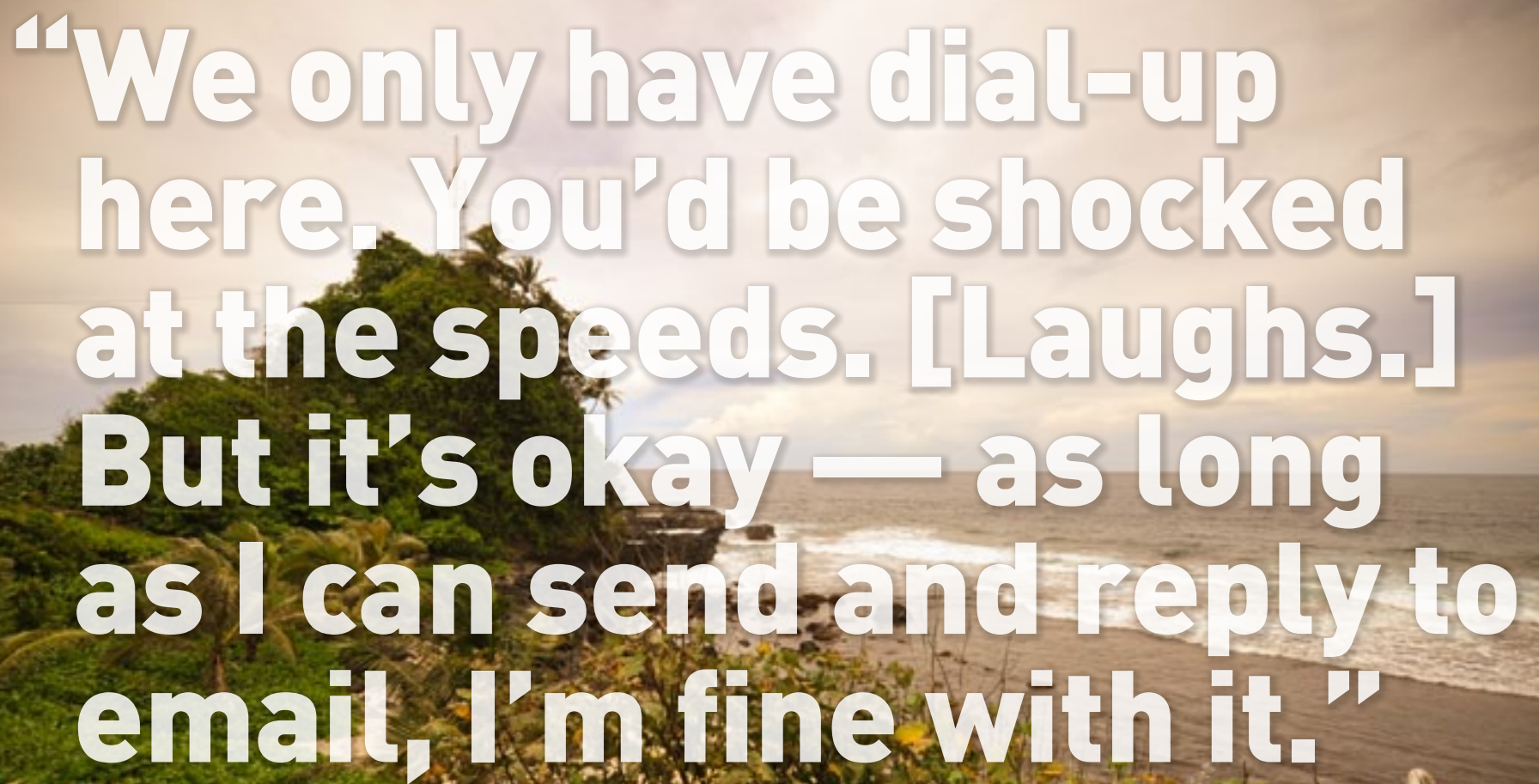


# INTERNET TALES FROM THE SOUTH PACIFIC

## Bringing Wireless to the Disconnected

BY DARREN MURPH





**“We only have dial-up here. You’d be shocked at the speeds. [Laughs.] But it’s okay — as long as I can send and reply to email, I’m fine with it.”**

● Those were the words spoken to me just weeks ago by the absolutely precious owner of Litia Sini Beach Resort on the extreme southeastern tip of Upolo. For those unaware, that’s Samoa’s most populous island (approximately 135,000 people) — a sliver of lush, mountainous land dropped almost perfectly in the center of the Pacific Ocean. I chuckled a bit upon hearing it, immediately realizing that I had a connection in the palm of my hand that was 20, 30, perhaps even 40 times quicker than what this business owner was relying on. She paused, as if to collect her thoughts before going into a familiar spiel about the resort’s amenities, and then drew my attention to the display of her laptop.

“It’s still a draft for now, but this is the new tsunami evacuation plan that we’re working on. Soon, we’ll have this in

each fale. It’s taking a bit of time to get right, as the drawings are actually done in New Zealand.”

I nodded my head in understanding, immediately thinking that this must be in reaction to the catastrophic tsunami of September 2009, caused by a magnitude 8.1 submarine earthquake that hit barely 100 miles from the very spot I was sitting. It was the largest quake of 2009. The entire resort was leveled. Dozens upon dozens were killed. And here we were, over two full years later, and the evacuation schematics are still in “draft.” Simultaneously, I wondered just how large that PDF was that my eyes were seeing. 1MB? 4MB? How many minutes of her day were spent downloading each new copy on a dial-up connection? How much sooner could these plans have been solidified if copi-





ous amounts of affordable broadband internet were at her fingertips? How many *hours* would she spend downloading the enlarged copy suitable for printing and posting as a public notice just inside the resort?

While my own mental gears were turning, a soft, cadenced slap of waves continued on behind me, fellow guests retreated to their porches with a good book and the government of Samoa decided to kill the power to the entire village without so much as a warning.

“Due to the emergency,” I was told. “We’re calling soon to see about when it will be back.”

Without a second thought, I pulled out a half-charged Galaxy S II and furiously Googled weather conditions for the surrounding area, watching intently as the up and down arrows beneath that comforting “H+” logo turned on and off.

Within a second, it was clear that whatever “emergency” we were dealing with didn’t involve a life-threatening act of God, and within another, I had turned the handset completely off. “I better save whatever juice is left in here,” I told my wife. “Yeah — kind of crazy that you can get 3G out here,” she replied.

As it turns out, “crazy” doesn’t even begin to describe it.

### **Taken for Granted**

Samoa is just one place that provides a vivid, undeniable reminder of just how often I take the internet for granted. I grew up in a generation that *demand*ed the internet; one where the expectation of near-ubiquity was the norm. But here, thousands of miles from home and merely 80 miles from America’s nearest overseas territory, the mindset is different. I can’t say for sure that wide-

spread, affordable, high-speed access to the World Wide Web is an immediate recipe for a nation's success, but I can

say that it puts a country's people in a far better place than they'd be without it. Just as books are vital to literacy, the internet is now vital to economic growth and development. I've always *known* these things, but being planted in a place for a solid week where the internet was harder to come by than those *other* essentials had a serious impact on me. Am I crazy for thinking high-speed internet access should be a human right? Probably, but some things are worth being called crazy for.

The good news, however, is that Samoa — precisely like Fiji and so many other emerging nations — is hopping on the internet bandwagon at precisely the right time. Rather than deal with costly hardline infrastructure — spending millions running wire to impossibly remote villages that don't even count sealed roads as an accessible luxury — they're skipping right to wireless. Digicel has operated a 2G network on Samoa for some time now, and in fact, I was impressed by how many Digicel billboards were advertising a simple dumbphone-to-dumbphone money transfer process that nations like America never really seemed to embrace. But money transfers are only the start.

### The Wireless Revolution is Real

When I waltzed into APW airport at some absurd hour of the morning, I was hit with a full-frontal advertising blitz.



“Samoa's First 4G Network!” the signs proclaimed. The entire immigration and luggage hall was splattered with them, showcasing BlueSky, Samoa's sparkling new wireless network. “Whoa, 4G in Samoa?” I asked myself. Indeed. Well, kind of. As it turns out, even the childish marketing speak that has baffled simpletons in America found a way to this island, as the network actually tops out at HSPA+. It's not LTE, nor WiMAX, but 21Mbps down and 5.7Mbps up (the maximum offered here) is not only game-changing for the people of Samoa; it's transformational.

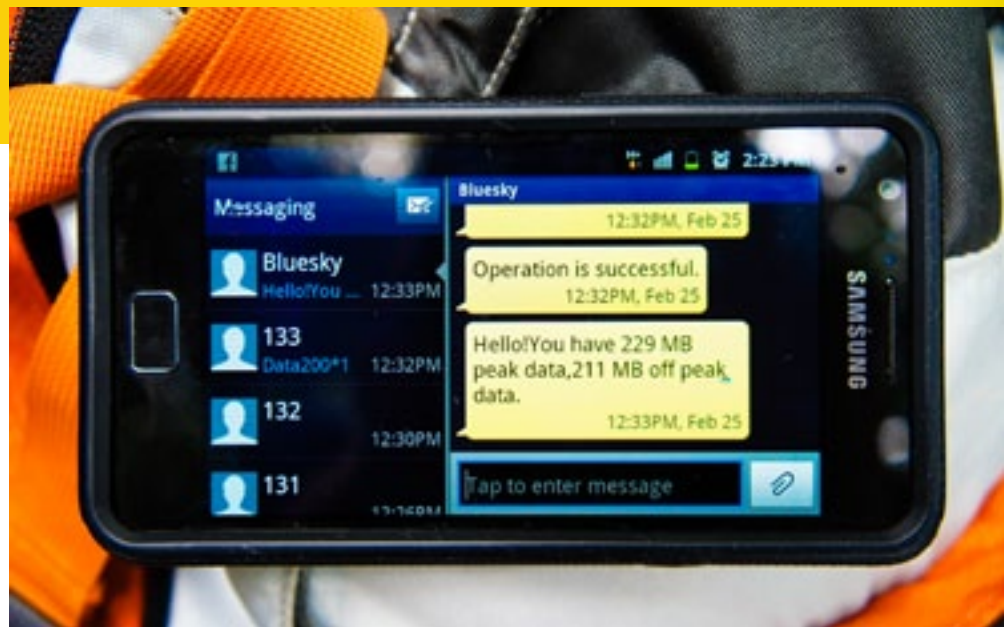
Unfortunately, the BlueSky office in the airport was closed for the night, but a quick drive to downtown Apia the next morning found me at a bona fide





BlueSky retail store. Within 15 minutes I was in and out with a local SIM card, programmed with 200MB of data. So, there's good news and rough news here, and I'll give you the latter first.

For some reason — economics, if I had to hazard a guess — BlueSky is pricing its 200MB data package at SAT\$80 (that's around USD\$40), and it's split into two buckets: 100MB to be used from 7AM to 7PM, and 100MB to be used during the non-peak hours of 7:01PM to 6:59AM. Just to add perspective, Virgin Mobile USA offers contract-free mobile hotspots with a USD\$20 plan that offers 500MB; USD\$50 gets you unlimited data, with 3G speeds for the first 2.5GB. Needless to say, BlueSky's offering is mighty, *mighty* pricey, par-



ticularly for most locals, but this is also the company hawking a year-old Galaxy S II for SAT\$2,199, or just over \$1,000 in greenbacks. My allotted 200MB vanished fairly quickly when using Maps to guide myself around foreign streets, Google to find nearby attractions and

Gmail to keep up with work. Moreover, the network itself wasn't entirely reliable, with a data outage lasting a solid five hours one morning on at least the eastern side of Upolo.

Now, the good news: someone took a chance.

There's probably no business case in existence that could prove a staggeringly expensive HSPA+ rollout on Samoa would be worth it, but I'm here to tell you that it is. Digicel's network in Lolumanu (where Litia Sini Beach Resort is located) can only muster GPRS data speeds. That's slower than EDGE, and in practice, it's thoroughly useless. BlueSky offers five bars of HSPA+ here, and there can't be over 100 people that call this place home. Within five years, I'm betting that Lydia will ditch her dial-up connection and rely solely on a BlueSky SIM to run her business — a SIM that can travel with her across the island, right to the heart of Apia where few tourists bother to leave. In fact, that's exactly what BlueSky is hoping for; the company is straight-up marketing its newfangled technology as a true substitute to lackluster (and expensive) landline-based internet service. I know AT&T and Verizon Wireless are in no position to strain their networks in the same way, but still — *this* is the future.

### **Priced out of Reach**

Just to give you an idea of how impossibly out-of-reach high-speed internet is in Samoa, let's take a look at the nation's self-proclaimed "premiere"

ISP, iPasifika. The *starter* plan comes in at SAT\$99 (around USD\$50) per month, and includes — wait for it — 500MB. Overage fees? SAT\$0.30 per megabyte. Need a few more MBs? All it takes to get 10,000 each month is a paltry SAT\$1,075 (a little over USD\$500), and it's probably worth mentioning that your speeds are throttled to a maximum of 128Kbps during daylight hours and 512Kbps during the night. If you need 10GB of monthly throughput for your business (evidently "business" means "1Mbps"), you can get that installed for the low, low sum of SAT\$1,895 (around USD\$950). That's a small fortune to your everyday American; to many Samoans, those tallies are just laughable.

To wit, 4G wireless services offer a tremendous alternative to something that might as well not exist given the aforesaid price points. Imagine a world where this far-flung beach resort has the bandwidth to upload daily sunrise videos or captures of local dances to enchant potential customers. Imagine a world where the owner's internet is fast enough to enable her to reply to reservation requests in hours, not days. Imagine a world where she's able to handle all of her online duties while she sips her morning coffee, instead of the same chores dragging on through the morning. It's not just different, it's a seismic shift. I can see the BlueSky cell tower from my fale; it doesn't look like a detractor of the natural beauty. It looks like a broadcasting beacon of hope.





## Economic Impact

A few hours to the west sit a man and his wife in Vanuatu, an isolated island chain that's only now beginning to explore the efforts of tourism. Some of the South Pacific's most excellent diving is here, not to mention dozens of varied islands with unspoiled beauty, incredibly hospitable people and leaders who are grasping with ways to connect far more than Port Vila (Vanuatu's capital) with the rest of the world. I met them here in Samoa. They'd been in one of the more remote islands in the aforesaid nation for the past year, helping the locals to better their healthcare practices. In speaking to the gentleman about this piece, he mentioned a glistening new tourism building in the capital, replete with big-screen televisions

that showcased looping videos of each island's grandeur.

"It's spectacularly useless," he quipped. "They still believe that people arrive in Port Vila and *then* decide which outer islands to visit. Truth is, these decisions are being made on couches in Sydney and Los Angeles, months before they ever book a plane ticket."

He's right. The internet is perhaps even harder to come by in Vanuatu, where a large part of the population doesn't even bother with email. "Give 'em time," I think. They may have missed the broadband revolution, but the high-speed wireless revolution is at their doorstep, and I'm guessing it's just a matter of time before Vanuatu's remote villagers bypass the desktop





completely and end up with something far more portable — and, in truth, more powerful.

### Problems of Our Own

The conversation comes full circle when you look at highly developed nations like the UK and America. In England, O2 will happily sell you a prepaid SIM with a few hundred megabytes of data. It's all fairly simple, really. But use over 100MB per day, and you're cut off until the next 24-hour cycle. Oh, and image uploads are horrifically compressed, so forget about tethering to get a bit of work (read: Facebooking) done. In the States, the situation is even more pathetic. Show up in any of our major airports and look for a prepaid data


SIM — go on, I implore you. It's impossible to find. Sure, a GoPhone can be picked up from any Walmart, but it's not the same. Empowering visitors with the ability to immediately have wireless, high-speed internet access as soon as they arrive within one's borders just makes business sense, and the situation is so insanely ignored by our carriers that startups like Xcom Global have been able to set up MiFi rental shops at LAX to fill the void in some tiny way.

The point? Wireless build-outs show the promise to bring the entire internet to the fringes of the world that desperately need it, for fear of falling forever behind. Furthermore, I view my recent jaunts to corners of the globe that aren't quite as frequented as proof of a few





things: one, the wireless explosion is still ongoing, and two, it's going to change lives in a huge way. The thought of having go-anywhere, high-speed internet access in a place like Samoa was a pipe dream just a half-decade ago. A score from now, I suspect the tourism industry and its economy on the whole will be far more developed than it is today — and if ever the world could work out a global data roaming agreement that

makes sense, we'd see yet another monumental boom. Exporting and importing would no longer require phone calls and painful dealings with dial-up; but of course, that's a different discussion for a different itinerary. 

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*Darren holds the Guinness World Record for being the most prolific professional blogger on planet Earth. He's also an argonaut.*

## Q&A

### STEVE WOZNIAK

PIONEERED THE PERSONAL COMPUTING INDUSTRY WITH THE APPLE I AND II. NOW HE TACKLES OUR BURNING QUESTIONS IN THE MOST THOROUGH Q&A TO DATE.

SPOILER ALERT: HE HAS A THING FOR THE BITTEN FRUIT.





## WHAT GADGET DO YOU DEPEND ON MOST?

**WOZNIAK:** Macbook Pro 17-inch for most of my email, including web links and video links.

I have a calendar life that is complicated, so I use BusyCal and Google Calendar. I keep two different browsers open to avoid some confusion. I enter calendar dates with time zones, which I can't do on my iPhone. I watch DVD's since I don't have broadband where I live. I record videos for promotions and interviews and it's handy to have the notes in front of me on the screen. I do a lot of Skype interviews and it's handy to see notes for those as well. I often copy from one source (web page maybe) to an email I'm composing.

I read Google news and use Net-NewsWire to keep up with general and tech news. I use it when I travel for Slingbox. I'm better on the large keyboard. The larger screen is great for maps and photo viewing. I also keep tons of music and movies on the SSD, although the smaller size cramps me over a full HD. I often take notes regarding business talks and paste them into TextEdit docs to view during phone calls. These calls I usually

make with my iPhone. I use File-Chute to upload files that I want to distribute but which are too large for email. I use Dropbox to share with my iPhones. I'm always backed up with my home Time Capsule. I write AppleScripts, too.

Most of my photos I collect with iPhoto but I use Aperture for my finer photos, mostly from my Leica M9. I keep reminder links and files on my desktop and I have categories (folders) in my dock for things like "fun relief" and "important". I keep folders on my desktop for things like the songs I'm currently attracted to and upcoming speech events. I also keep many notes of info I need all the time, like home IP numbers and game scores, in Stickies, but I close Stickers to keep things neater. I also have a few games in my dock for quick access.

IF YOU READ THIS  
YOU'LL SEE WHY  
MY LIFE HAS MANY  
ASPECTS THAT  
DON'T TRANSLATE  
WELL TO AN IPAD  
OR IPHONE AS MY  
PRIMARY GADGET



## WHICH DO YOU LOOK BACK UPON MOST FONDLY?

My first transistor radio was the heart of my gadget love today. It fit in my hand and brought me a world of music 24 / 7. Even while I slept it was right there beside me playing. The ham radio transmitter and receiver I built when I was 10 was a very important gadget. I learned a lot of radio theory and [about] electronics and construction of electronic devices that would stick for life. I didn't know the word 'gadget' but I would always be in love with devices that were interactive, where you turned dials and the device responds. I wouldn't say that my first 4-function calculator was a favorite gadget but my HP-35 scientific calculator certainly was. I guess before that you'd call my slide rule a gadget.

I had a tube radio that brought the early days of FM to me in my bedroom at home. Eventually, in my own apartment, I would have a Pioneer 828 Receiver that was the heart of my music life. I had a turntable, too, but I got a reel-to-reel tape recorder (GE) at a local discount store and it was a very unusual gadget for 1970. I recorded all my Dylan albums

and others onto tape this way.

## AFTER MY THIRD YEAR OF COLLEGE, I BUILT A BUNCH OF GADGETS FOR MYSELF AND THEY WERE ALL FAVORITES

One was a *Pong* game that worked with the TV in my apartment. I would have called the *Breakout* game that I designed for Atari a favorite gadget but they got the prototype and I don't even think I kept a schematic. My TV terminal to access computers on the ARPANET over modems was a great gadget and it got a lot of attention. Needless to say, the Apple I and Apple II were useful and fun gadgets.

After that I'd say that my first Navigation system (an Alpine unit in my Hummer) was a great gadget and life would never be the same. The Apple IIc was my favorite Apple II. I actually liked the Portable Macintosh. Possibly my favorite Macintosh ever was the Duo, although I very much like the current MacBook Pros.

Over the years I had pocket TVs





and small, battery-operated video tape players for movies. I can't pinpoint the models now. I had many very thin CD players and recording Walkmen — usually such gadgets were Sony branded.

Add to this list every iPod ever made (and every size), every iPhone and the iPads.

My first camera was a Kodak Brownie camera. I had too many important cameras in my life to detail them all here. Some early Casio PHD (Push Here Dummy) cameras were so thin I loved them and recommended them. I liked the Sony cameras with internal zoom. I've had a lot of analog and digital DSL cameras but not since the Canon D5 Mk II. Plus, I dearly treasure my recent Leica M9-P camera.

I had the Motorola 'brick' cell phone and then moved on with all the subsequent Motorola advances... Star TAC, Elite, etc. I probably used my RAZR the longest of any phone. In later digital phone days I liked my Nokia 8890 very much. When the iPhone came out, I'd carry the iPhone for internet stuff and the RAZR for phone calls, for quite a while.

The Segway is a great gadget that I haven't had to move on from, in all the time since it first came out.

I had a couple of very nice scan-

ners that I used to listen to analog cell phone calls. One was something like RC-1 and it fit in your palm. The other had a name like AOR 900 or something. I'd have to go out to the garage to get the exact models. I used these quite a bit and have good stories as to what I heard.

I could add many to this list.

FOR EACH OF  
THESE, AND MANY  
MORE, I HAVE MANY  
SPECIFIC MEMORIES  
OF CARRYING THEM  
AROUND AND  
SHOWING THEM OFF  
AND USING THEM  
IN WAYS THAT  
MEANT A LOT TO ME.

I'm sure that I've missed many others.

#### **WHICH COMPANY DOES THE MOST TO PUSH THE INDUSTRY?**

You have to be kidding. Apple leads the way. A bunch of companies could be like an ocean of products with waves and ripples. But Apple is an Everest. The day Apple introduces a new prod-



uct you know it's not the same as before and you know it's the future for everyone.

#### **WHAT IS YOUR OPERATING SYSTEM OF CHOICE?**

OS X. We had something similar in the LISA but at the wrong point in time, cost-wise. I never got comfortable when I had to use Windows. As for mobile devices, I prefer iOS. It's limited in some ways but that can be an advantage for many of us.

#### **WHAT ARE YOUR FAVORITE GADGET NAMES?**

I'm not coming up with a good answer to this one. Apple has to be first. Newton was great too. iRobot isn't bad. Google is another great name. I have loved the name "Mophie" as well. MiFi isn't bad.

#### **WHAT ARE YOUR LEAST FAVORITE?**

Boring technical names, like ThinkPad xxxx. For things like cameras there are never enough names so they mostly have boring numbers.

#### **WHICH APP DO YOU DEPEND ON MOST?**

Mail. I wish that Eudora, the unsupported original Eudora, would run under Lion. It made my life much easier and better.

#### **WHAT TRAITS DO YOU MOST DEPLORE IN A SMARTPHONE?**

Lousy sound quality, even for voice. The iPhone is the best that I've had, by far.

When battery life is poor. Hard to truly multitask while on a call without a second phone. Navigating web pages can be frustrating on a small screen. Accidentally touching the screen can be disastrous on occasion.

I DON'T LIKE  
RUNNING AN APP  
TO TAKE A PHOTO.  
MORE AND MORE  
APPS AND FEATURES  
REQUIRE INTERNET  
CONNECTION  
AND SERVERS  
[THAT ARE] NOT  
OVERBURDENED

When servers are down, the messaging is all wrong, causing you to take unneeded actions like resetting accounts. Printing limitations.

#### **WHICH DO YOU MOST ADMIRE?**

Slimness, single-handed usability, hands-free links to cars, use of





camera in apps for things like QR codes and Google Goggles, phone locating services, NFC payment systems with the ability to put funds on NFC via internet rather than ATM, syncing with computer, texting, VoIP apps like Line2 and Skype, Sling Player apps, radio apps, Sirius-XM app, voice recording for reminders, photos and movie taking.

#### **WHAT IS YOUR IDEA OF THE PERFECT DEVICE?**

Hard to say. Best features of all the best gadgets plus a voice recognition system that really understands me and what I want, no matter how I say it. It returns answers, rather than links to sites that may not even have the answer I want. It would 'see' me with video and gauge other things about what I'm saying or doing. It would know me as well as any best friend and always know what to say and how to say it to me. I would want to give up on human friends.

#### **WHAT IS YOUR EARLIEST GADGET MEMORY?**

Transistor radio, about 1958.

#### **WHAT TECHNOLOGICAL ADVANCEMENT DO YOU MOST ADMIRE?**

The transistor or the planar process for making chips. That's tech-

nology at the component level. At the device level, I'd say the iPhone is the best current one, although the Apple ][ is close (taking into account when it was).

#### **WHICH DO YOU MOST DESPISE?**

## MOVING TO THE CLOUD TOO FAST...YOU DON'T OWN ANYTHING OUT THERE

You aren't assured that what works today will even be there tomorrow. Things that used to be built into my iPhone now fail because the cloud is 'down.'

I despised my HTC Thunderbolt phone greatly. I hated the Sense UI and the battery would often go down in one hour.

I also despise email because I get too much for my open policies.

International cellular data is very dangerous. I had a \$7,000 bill once after half a day in Germany. I had a \$16,000 bill after a day in Moscow with my iPhone in my pocket the entire time except maybe a couple of Foursquare check-ins. (AT&T has no coverage of Russia on any international data plans and if your iPhone is



locked to AT&T, you can forget about a local SIM card.)

**WHAT FAULT ARE YOU MOST TOLERANT OF IN A GADGET?**

Color? Screen quality? Sound quality?

**WHICH ARE YOU MOST INTOLERANT OF?**

Every time you do something that would seem to be the right thing based on other parts of life, but it does the wrong thing. Battery running out too fast. Apps quitting after working for a while to get data entered correctly. Something that works in one mode fails in another (SIRI and hands-free connection). Too many to list here.

**WHEN HAS YOUR SMARTPHONE BEEN OF THE MOST HELP?**

Travel — keeping up with flight info, checking tip rules for a country, looking for concerts in a city, notifying friends, photo memories, trading contact info, etc.

**WHAT DEVICE DO YOU COVET MOST?**

iPhone 4S unlocked. Beautiful. Easy to manage. Just right in so many ways.

**IF YOU COULD CHANGE ONE THING ABOUT YOUR PHONE WHAT WOULD IT**

**BE?**

Built in auto navigation.

**WHAT DOES BEING CONNECTED MEAN TO YOU?**


Not as much as to many. I don't use my mobile devices much while walking around. I save computer time for my computer. I don't like my iPhone to take me from the friends I'm with. Hotel internet is so unreliable and slow that I carry many mifi's and mobile hotspot phones though, so in that way my phones are a big part of my connectivity.

**WHEN ARE YOU LEAST LIKELY TO REPLY TO AN EMAIL?**

When I'm busy and it requires a long answer.

**WHEN DID YOU LAST DISCONNECT?**

## RIGHT NOW I FEAR DISCONNECTING FROM THE INTERNET

But in the late 90's I took a three-week cruise in the South Pacific with no phone or internet service. I had other priorities and survived. It was a very pleasant time. 





TECH TALK IS BROUGHT TO YOU BY



\* NOT REALLY

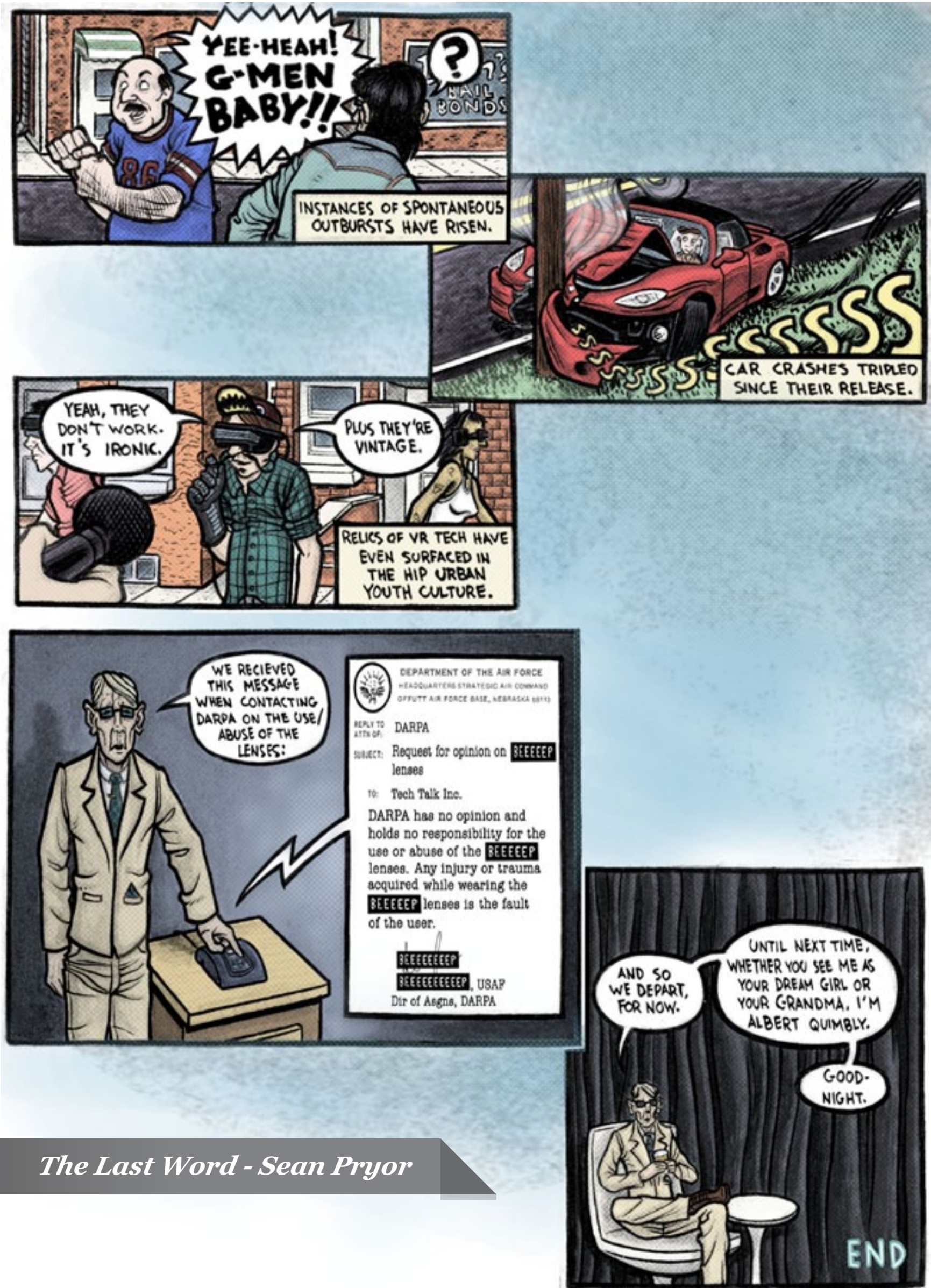


THE APPLICATIONS FOR THE LENSES WERE LIMITLESS. MANY TRADES AND ACTIVITIES BENEFITED FROM THEIR USE.

SADLY, REPORTS OF THE LENSES' ABUSE CAME FLOWING IN.







The Last Word - Sean Pryor



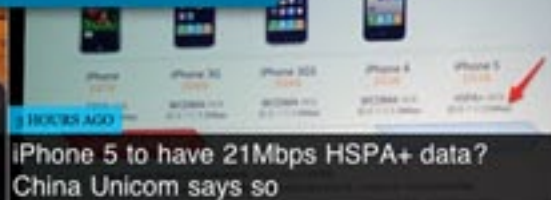
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IRL: Sony NEX-C3, Garmin Forerunner 110 and the Elgato Turbo.264 HD



iPhone 5 to have 21Mbps HSPA+ data? China Unicom says so



## Dell confirms XPS 14z will go on sale in the US in the 'coming weeks'

Remember that XPS 14z Dell teased at IFA? Yeah, well, it's arriving soon. As in, "the coming weeks" soon. The company just confirmed it's on the cusp of shipping here in the states, and while the outfit stopped short of giving a starting price, it's good and ready to talk specs. As we reported last month, it has the same industri...

By Dana Wollman September 29, 2011 12:35PM



## iPhone 5 cases and realistic unibody dummy show off incredible slimness

While we're only five days away from finding out the true appearance of the next-generation iPhone, our good friends over at BENM.AT went ahead and crafted their very own unibody dummy using CAD drawings, CNC tools and a block of aluminum -- seriously, that's how they roll! Granted, this work's only based on...

By Richard Lai September 29, 2011 12:13PM



## Kobo's Vox Android tablet appears online briefly, gets Canadian release date and pricing

A day after another little-known e-reader manufacturer announced a tablet, a new Android slate from Kobo made a brief online appearance on Future Shop's site, only to be quickly taken down. According to the Canadian retailer, the FCC-approved tablet will offer up a 7-inch display with a 1024 x 600 resolution, WiF...

By Brian Heater September 29, 2011 11:53AM



## Iceland gets a data center to call its own, still believes in fairies

You say Iceland, we immediately think Eyjafjallajökull -- and no, we haven't had a narcoleptic collapse upon these very keys. It's been over a year since that volcano swept the headlines and interrupted air travel, providing outsiders with a skewed

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